INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/15621

1. This International Search Authority has found 22 inventions claimed in the International Application covered by the claims indicated below:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s)1-25, 29-38, 49, 53, and 54 drawn to isolated nucleic acid molecules encoding a polypeptide capable of binding a p75ntr receptor, vectors, host cells, methods of using the isolated nucleic acid molecules to produce polypeptides, and polypeptides.
Group II, claim(s) 26-28, drawn to antisense oligonucleotides.
Group III, claim(s)39-42, drawn to antibodies.
Group IV, claim(s) 43-45, drawn to a method of inducing apoptosis in cells comprising expressing a polypeptide capable of binding p75ntr receptor in cells.
Group V, claim(s) 46-48, drawn to a transgenic nonhuman mammal comprising a nucleic acid molecule encoding a polypeptide capable of binding a p75ntr receptor and a method of using the transgenic animal.
Group VI, claim(s)50-52, drawn to a method of inducing apoptosis of cells in a subject comprising administering a purified polypeptide capable of binding p75ntr receptor.
Group VII, claim(s) 55-68, drawn to a method of identifying a compound capable of inhibiting binding between p75ntr receptor and a polypeptide capable of binding the receptor.
Group VIII, claim(s) 69-72, drawn to a method for identifying an apoptosis-inducing compound.
Group IX, claim(s)73-77, drawn to a method for screening cDNA libraries of a polypeptide capable of binding p75ntr receptor.
Group X, claim(s) 78, drawn to a method to induce caspase-2 and caspase-3 activity requiring co-expression of the p75ntr receptor and a receptor-binding ligand.
Group XI, claim(s) 79, drawn to a method to inhibit NF-kB activation in a cell with a polypeptide capable of binding p75ntr receptor and p75ntr.
Group XII, claim(s)80-82, drawn to a method for detecting neurodegenerative disease by detecting expression levels of p75ntr and a polypeptide capable of binding p75ntr receptor.
Group XIII, claim(s) 83-85, drawn to a transgenic nonhuman mammal comprising a polynucleotide encoding a human HGR74 protein, and a method of using the transgenic mammal.
Group XIV, claim(s)86, and 90, drawn to a method of producing human HGR74 protein.
Group XV, claim(s) 87-89, drawn to a method of inducing apoptosis in a subject comprising administering purified human HGR74 protein.
Group XVI, claim(s) 91-94, drawn to a method for identifying an apoptosis inducing compound comprising measuring the expression levels of human HGR74 and p75ntr.
Group XVII, claim(s)95-99, drawn to a method for screening cDNA libraries for human HGR74 protein.
Group XVIII, claim(s) 100, drawn to a method to induce caspase-2 and caspase-3 activity by co-expression of human HGR74 protein and p75ntr.
Group XIX, claim(s) 101, drawn to a method to inhibit NF-kB activation in a cell with human HGR74 protein and p75ntr.
Group XX, claim(s)102-104, drawn to a method for detecting neurodegenerative disease by detecting expression levels of human HGR74 protein and p75ntr.
Group XXI, claim(s) 105-130, drawn to a method of identifying an apoptosis inhibitor.
Group XXII, claim(s) 131-137, drawn to isolated nucleic acid molecules encoding deletion mutants of neurotrophin associated cell death executor protein.

and it considers that the International Application does not comply with the requirements of unity of invention (Rules 13.1, 13.2 and 13.3) for the reasons indicated below:
This application contains claims directed to more than one species of the generic invention. These species are deemed to lack Unity of Invention because they are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for more than one species to be searched, the appropriate additional search fees must be paid. The species are as follows:

a polypeptide capable of binding p75ntr receptor is
a. a neurotrophin associated cell death executor
b. a human HGR74 protein
c. a musnade3a sequence
d. a hunade3a1 sequence
e. a hunade3a2 sequence
f. a ratnad3a sequence